# USABILITY REPORT

*EXHIBIT A*

**DATE:**

**TO:**      Lou Nell Gerard

**FROM:**    Wenli Zhu

**RE:**       FrontPage 2002 Photo Gallery (IDIS 6248)

**CC:**       FrontPage All, Documents Usability Group

## SUMMARY

*Purpose and Scope*

The first study on FrontPage 2002 Photo Gallery was conducted from              . The purpose of the study was to understand whether users will be able to find, create and modify a photo gallery in FrontPage. More specifically, we were interested in answering the following questions:

1. Will users be able to find the photo gallery component?

2. Will users be able to use it to create a photo gallery? What problems and difficulties will users have?

3. Will users be able to modify a photo gallery (add photos, remove photos, edit photos, change the layout of a photo gallery, change caption and description text)?

4. Will users be able to create a photo album web site?

For more information about the Photo Gallery feature, see http://office10/teams/FrontPage/specs/Wizards/Photo%20Album.htm.

*Methods*

A total of 8 subjects participated in the study. Half of them were FrontPage 2000 users and the other half had never used FrontPage.

The four FrontPage 2000 users had been using FrontPage 2000 for a few months to create or update their personal web sites or a web site for work or for hobby. Two of them had put more than 8 pictures on their web site and the other two didn't have pictures on their web sites. Two started creating their web sites using AOL editor or Microsoft Publisher and the other two using FrontPage 98 or FrontPage 2000 Beta.

Among the 4 participants who had never used FrontPage, 2 had created a web site before, using Microsoft Publisher or the MSN home page templates. The other 2 had never created a web site. They were Internet beginners (scored beginner on the Internet knowledge questionnaire, see http://usable/software/knowledge/) who browsed the web on a regular basis.

A private build of FrontPage 2002 was used in the study. Appendices 1 through 8 have bitmaps of the menus and the dialogs tested. Appendices 1 through 3 show the three different entry points to create a photo gallery: (1) users can use the "Insert" menu and choose "Insert | Picture | Photo Gallery" (as shown in Appendix 1); (2) users can choose "General Templates" from the "File New" work pane and then choose the "Photo Gallery" template (as shown in Appendix 2); (3) users can choose the "Photo Album Wizard" from the "Web Sites" tab in "General Templates" (as shown in Appendix 3). Appendix 4 and 5 show the two tabs of the "Photo Gallery Properties" dialog. Appendix 6 shows the "Edit Image" dialog and Appendix 7 shows the context menu on a photo gallery. Appendix 8 shows the screen where users can add galleries when using the "Photo Album Wizard".

Appendix 9 has more information about the subjects.

Each test session took about 1-2 hours. In the test, subjects first filled out a background questionnaire.

They then used FrontPage to do 10 tasks: creating a photo gallery, adding pictures, removing pictures, changing the layout, changing the order of the pictures, editing pictures and creating a photo album web site. See Appendix 10 for the task list.

## Key Findings

- Users will go to "Insert | Picture". However, they will think of "Insert | Picture | Photo Gallery" as inserting pictures *from* a photo gallery (like from clip art), not inserting pictures to create a photo gallery.

- Photo Gallery Properties dialog:
  - Some users may not notice the "Layout" tab.
  - Some users may not look at all the layout choices on the "Layout" tab and therefore may not realize that the slide show layout will arrange the thumbnails and the pictures automatically.
  - Some users may not realize they can have multiple pictures in a photo gallery.
  - Some users may think that the caption and the description fields are for the entire photo gallery.

- Modifying a photo gallery:
  - Users will discover "right-click" and "double-click" on a photo gallery. Overall, 5/8 subjects used right-click and 3/8 subjects used double-click.
  - However, some users may think of "Insert | Picture | Photo Gallery" as a re-entrant dialog and may try to use it to make changes to an existing gallery.
  - Some users may not think "Photo Gallery Properties" in the context menu will allow them to add pictures or change the layout of an existing gallery.
  - Once users know they can make changes to a photo gallery by using the "Photo Gallery Properties" dialog, they will not have problems adding pictures, removing pictures, changing the order of pictures, changing the layout or changing the number of pictures per row.
  - Users will not have problems with drag and drop to add pictures, although they may not think about using drag and drop.

- Editing a picture:
  - Users will find the "Edit" button in the "Photo Gallery Properties" dialog.
  - When users crop a picture, they may not know to click on the "Crop" button again to finish cropping. They may not expect the cropped image to be enlarged to fill the preview window.
  - Users will notice and understand the "Previous" and the "Next" buttons but they may not use them.

- The "Photo Gallery" template and the "Photo Album Wizard" will be hard to find.
  - The term "General Templates" may be too vague and too general to get users' interest and attention.
  - Users may not realize what is in "General Templates". For example, they may not realize that the web site wizards are also there.
  - The "General" tab is too cluttered. Users may not find the "Photo Gallery" template there.

- Photo Album Wizard:
  - Some users may not understand that the wizard will create a web site.
  - Some users may get confused when the wizard switches to the "Photo Gallery Properties" dialog. They may not understand whether they should do everything here on their own or expect the wizard to prompt them later.

# FINDINGS

1. **Users will go to "Insert | Picture". However, they will think of "Insert | Picture | Photo Gallery" as inserting pictures *from* a photo gallery (like from clip art), not inserting pictures to create a photo gallery.**

   In the first task, when asked to create a web site with several pictures, 7/8 subjects went to "Insert | Picture" right away but only 1/8 chose "Insert | Picture | Photo Gallery" (the "Insert" menu is shown in Appendix 1). The other 6 subjects chose "Insert | Picture | From File". Subjects said they saw "Photo Gallery" but thought of it as a collection or list of photos (like clip art) from which they can choose.

   **Proposed action:**

   ➢ Users will go to "Insert | Picture". We should keep "Photo Gallery" in the close vicinity. We could promote "Photo Gallery" to a higher level, i.e. to the "Insert" menu, below "Insert | Picture".

   ➢ Alternatively, if "Web Page Component" is broken down into several categories, we can add "Photo Gallery" there. The "Insert" menu will then include "Insert | Navigation Structure", "Insert Office Component", "Insert | Photo Gallery", etc.

   ➢ Either way, we should further test this.

2. **Photo Gallery Properties dialog:**

   • **Some users may not notice the "Layout" tab.**

   • **Some users may not look at all the layout choices on the "Layout" tab and therefore may not realize that the slide show layout will arrange the thumbnails and the pictures automatically.**

   • **Some users may not realize they can have multiple pictures in a photo gallery.**

   • **Some users may think that the caption and the description fields are for the entire photo gallery.**

   Because of the 2-tab design of the "Photo Gallery Properties" dialog (see Appendix 4 and 5), subjects sometimes didn't notice or forgot one of the tabs. For example, 4/8 subjects (S1, S3, S4 and S6) didn't see the "Layout" tab at first and didn't know how to make the photo gallery to look like the one they were asked to make (a slide show layout). They tried to drag the pictures directly or looked in the menus for something that will allow them to insert hyperlinks or a frame. Two subjects opened the "Photo Gallery Properties" dialog several times and looked at the buttons on the "Images" tab such as "move up", "move down", "edit" and "insert hyperlink". They just didn't see the "Layout" tab.

   Among the 4 subjects who saw and used the "Layout" tab, 2 switched to the "Layout" tab and then forgot to switch back. They didn't finish adding images or filling in the caption and description fields on the "Images" tab.

   2/8 subjects (S3 and S8) opened the "Layout" tab but didn't look at all the layout choices and therefore didn't realize the slide show layout will arrange the thumbnails and the pictures automatically.

   1/8 (S1) didn't think she can have multiple pictures in the photo gallery and tried to insert a photo gallery for each picture.

   1/8 (S5) thought the caption and the description fields were for the entire photo gallery.

   **Proposed action:**

   ➢ Add the text "you have 0 images in this gallery" next to the "Add Images" button.

   ➢ Show all the layout options side by side instead of in a list box.

   ➢ Add a "Layout" button on the "Images" tab that opens the "Layout" tab. Likewise, add an "Images" button on the "Layout" tab that opens the "Images" tab.

3.  **Modifying a photo gallery:**

    *   **Users will discover "right-click" and "double-click" on a photo gallery. Overall, 5/8 subjects used right-click and 3/8 subjects used double-click.**

    *   **However, some users may think of "Insert | Picture | Photo Gallery" as a re-entrant dialog and may try to use it to make changes to an existing gallery.**

    *   **Some users may not think "Photo Gallery Properties" in the context menu will allow them to add pictures or change the layout of an existing gallery.**

    *   **Once users know they can make changes to a photo gallery by using the "Photo Gallery Properties" dialog, they will not have problems adding pictures, removing pictures, changing the order of pictures, changing the layout or changing the number of pictures per row.**

    *   **Users will not have problems with drag and drop to add pictures, although they may not think about using drag and drop.**

    All subjects discovered right-click or double-click on a photo gallery. 4/8 used right-click in the first task. 3/8 subjects discovered double-click while trying to edit a photo gallery directly.

    When asked to add images to a photo gallery, 5/8 subjects chose "Insert | Picture | Photo Gallery" again. They didn't realize it would insert another photo gallery. 4/8 subjects chose "Insert | Picture | From File". When subjects realized or were told it wouldn't work, they right-clicked or double-clicked on the photo gallery. When asked to change the layout of a photo gallery, 1/8 subject (S1) chose "Insert | Picture | Photo Gallery". These results seemed to indicate that users may think of "Insert | Picture | Photo Gallery" as a re-entrant dialog and may try to use it to make changes to an existing gallery.

    Some subjects had difficulties recognizing "Photo Gallery Properties" in the context menu (as shown in Appendix 7). They didn't think it would allow them to change the "internal" structure of a photo gallery. Several times, 2/8 subjects (S5, S6) didn't choose "Photo Gallery Properties" from the context menu. S6 explained that she thought it was for the photo gallery as a whole, for example, to move the photo gallery around. She didn't think it was for making changes within the photo gallery.

    Once subjects knew they could edit the photo gallery through the "Photo Gallery Properties" dialog (after working through 1-2 tasks), they had no problem using the dialog to add pictures, remove pictures, change the order of pictures (using the "move up" and "move down" buttons), change the layout or change the number of pictures per row. Overall, 5/8 subjects (S1, S2, S4, S5, and S8) consistently used right-click and 3/8 subjects (S3, S6 and S7) consistently used double-click.

    When asked to find other ways to add pictures to a photo gallery, no subject thought of drag-and-drop on their own. Once they were told to do so, they all succeeded except 2 subjects (S5, S8) dropped the pictures on the page. They then made the correct drop the second time.

    **Proposed action:**

    ➢ Change "Photo Gallery Properties" in the context menu to "Edit Photo Gallery".

4.  **Editing a picture:**

    *   **Users will find the "Edit" button in the "Photo Gallery Properties" dialog.**

    *   **When users crop a picture, they may not know to click on the "Crop" button again to finish cropping. They may not expect the cropped image to be enlarged to fill the preview window.**

    *   **Users will notice and understand the "Previous" and the "Next" buttons but they may not use them.**

    All subjects found the "Edit" button in the "Photo Gallery Properties" dialog (as shown in Appendix 4). When asked to cut off part of a picture, they all used the "Crop" button in the "Edit Image" dialog (as shown in Appendix 6). However, subjects had two problems: (1) 6/8 subjects didn't know they had to click on the "Crop" button again to finish cropping; and (2) 4/8 subjects didn't think cropping was done properly. They didn't expect the cropped image to be enlarged to fill the preview window.

Subjects said they saw the "Previous" and the "Next" buttons.but only 2/8 used them.

**Proposed action:**

➢ Users shouldn't have to click on the "Crop" button again to finish cropping. Cropping should also be done if they hit the "OK" button, the "Previous" button or the "Next" button.

➢ The "Preview" window should show the cropped image WYSIWYG.

5. **The "Photo Gallery" template and the "Photo Album Wizard" will be hard to find.**

   • **The term "General Templates" may be too vague and too general to get users' interest and attention.**

   • **Users may not realize what is in "General Templates". For example, they may not realize that the web site wizards are also there.**

   • **The "General" tab is too cluttered. Users may not find the "Photo Gallery" template there.**

   In the first task, 5/8 subjects (S1, S4, S5, S6 and S7) looked at the "Start Working" work pane (as shown in Appendix 1) but only 1 (S5) chose "general templates". In a later task, all subjects were asked to find other ways to create a new photo gallery page and were told to look at the work pane. 3/8 chose something other than "General Templates" (for example, some subjects chose "create new project" or "document library templates")

   In the last task, subjects were asked to create a new web site with two pages of photo gallery. None of them thought about using "General Templates", although 4/8 subjects had seen the "Photo Album Wizard" in "General Templates" at some point in earlier tasks (for example, when looking for the "Photo Gallery" template). All the subjects were told to open the "Web Sites" tab in the dialog (as shown in Appendix 3).

   These results seemed to indicate that (1) the term "General Templates" is too vague and general to get users' interest and attention; and (2) users may not realize what is in there. For example, they may not realize that the web site creation wizards are also there. As a result, the templates and wizards designed to help users (particularly beginning users) may be overlooked.

   Also, the "General" tab is too cluttered. After subjects opened the "General Templates" dialog (as shown in Appendix 2), 5/8 didn't see the "Photo Gallery" template.

   ➢ Use more user-friendly labels and show the different categories on the work pane. For example, instead of having a single link labeled "General Templates", we may want to have several links on the work pane: "Create a new page based on templates", "Create a new web site using a wizard", "Create a new frame page" and "Create a new style sheet".

6. **Photo Album Wizard:**

   • **Some users may not understand that the wizard will create a web site.**

   • **Some users may get confused when the wizard switches to the "Photo Gallery Properties" dialog. They may not understand whether they should do everything here on their own or expect the wizard to prompt them later.**

   When looking at the "Photo Album Wizard" in the "Web Sites" tab (as shown in Appendix 3), 2/8 subjects didn't think it would create a web site. They thought it was for "internal" use, i.e. for them to create a photo album for themselves.
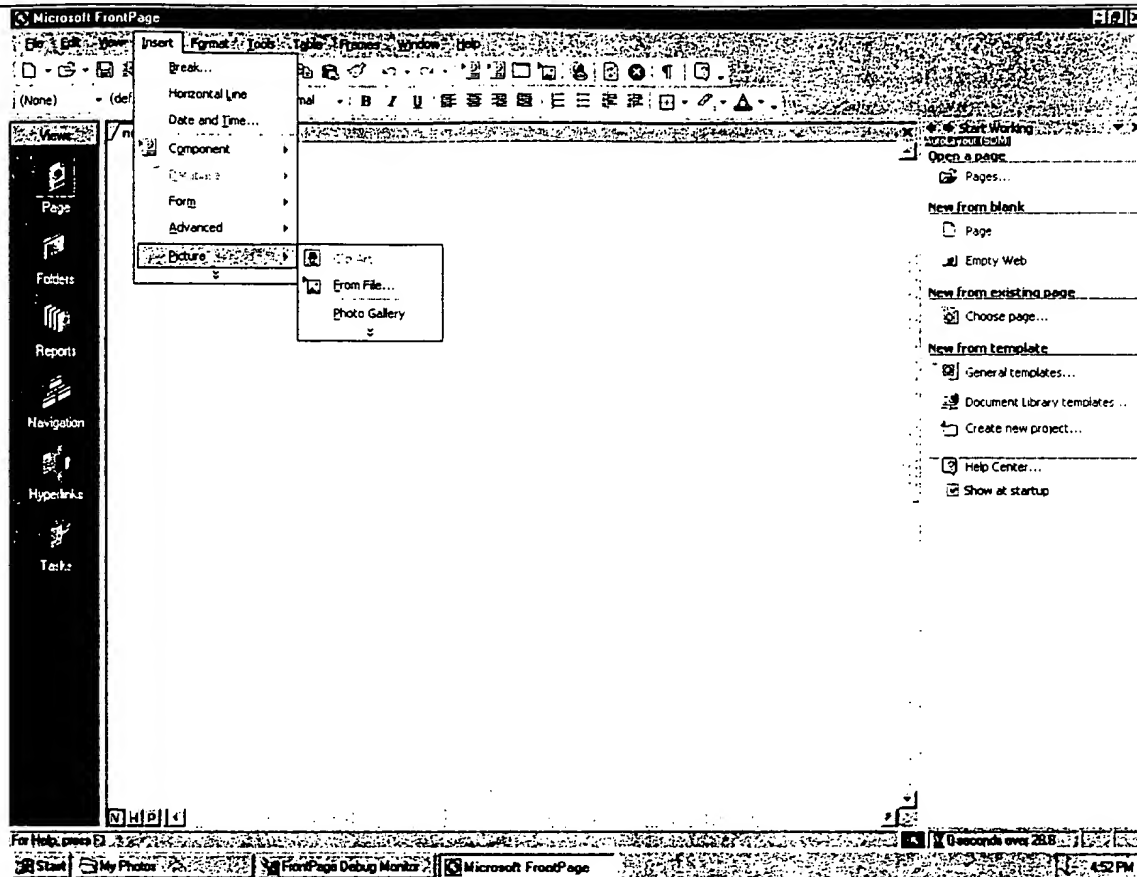
   When going through the wizard (as shown in Appendix 8), 7/8 subjects understood that each gallery was a page and created two galleries, each corresponding to a page. One subject (S6) didn't understand that. She got confused when the wizard switched to the "Photo Gallery Properties" dialog after she chose "Add Gallery". She wasn't sure whether she should take control and add images and do layout or if the wizard will prompt her later. She expected the wizard to prompt her later and didn't do anything with the layout. She also didn't create the second page, again expecting the wizard to prompt her to do it later.
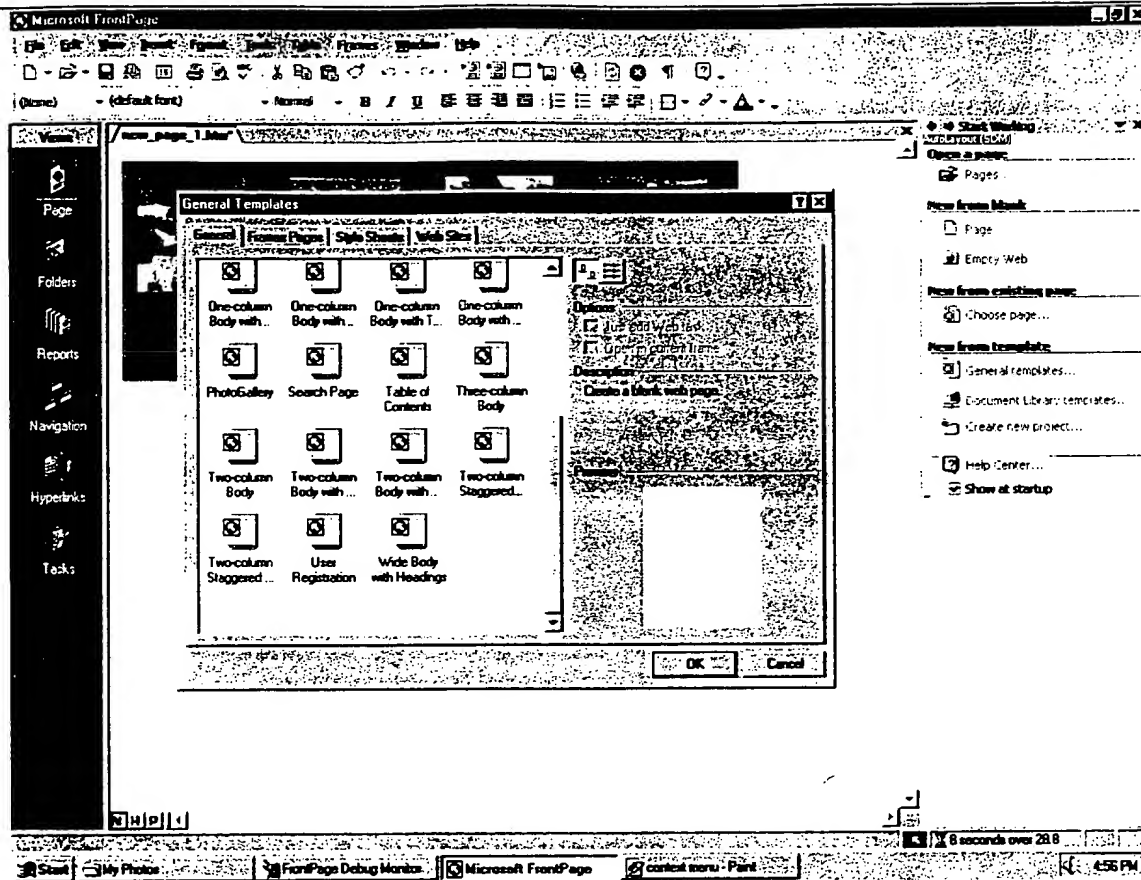
   **Proposed action:**

   ➢ Change the name "Photo Album Wizard" to "Photo Album Web"

> Can we change the "OK" button on the "Photo Gallery Properties" dialog to "Next"?
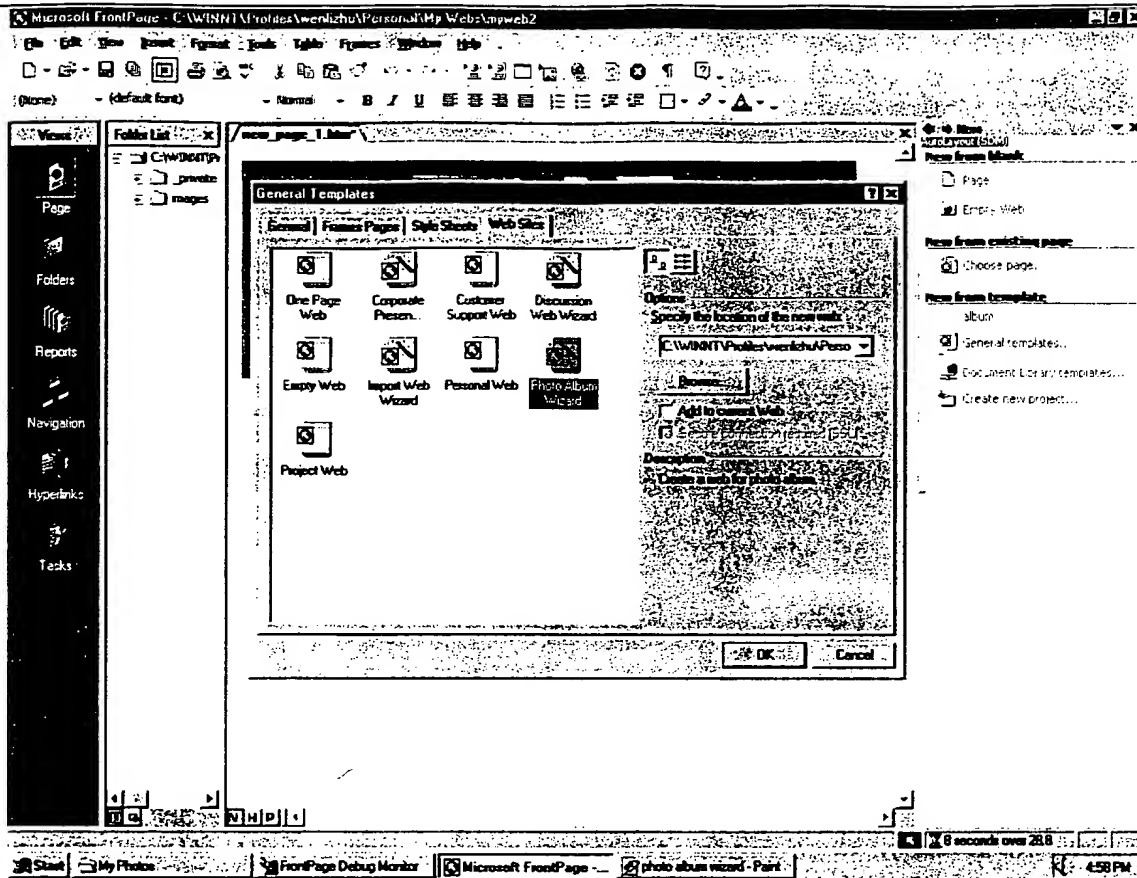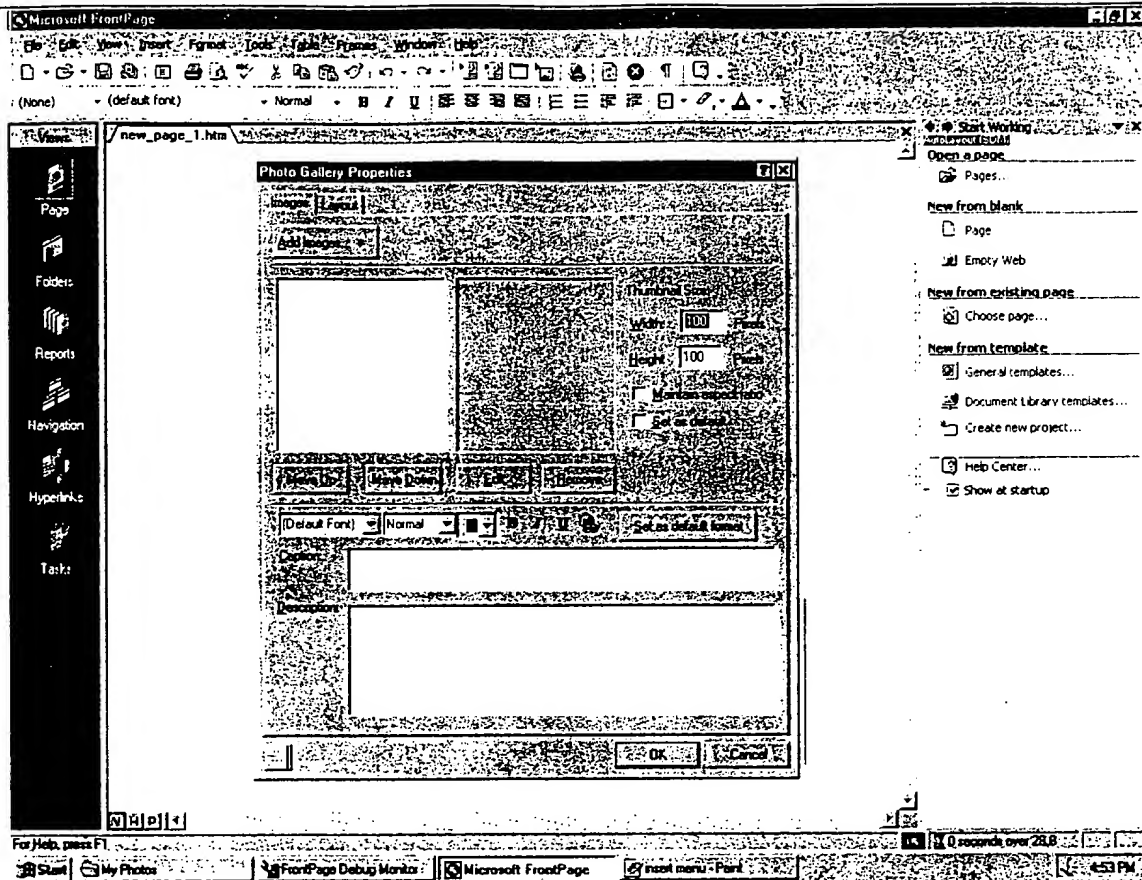
## APPENDIX 1: ENTRY POINT 1 – THE INSERT MENU

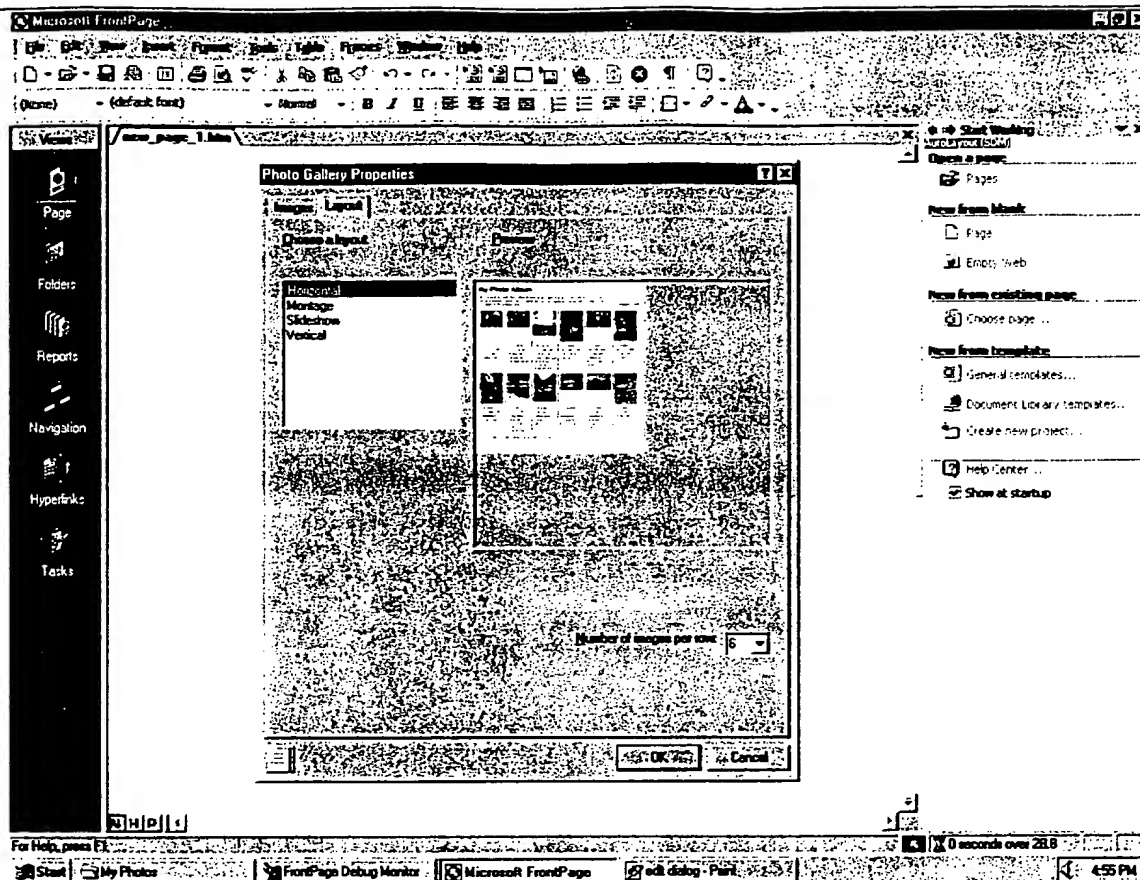## APPENDIX 2: ENTRY POINT 2 –GENERAL TEMPLATES
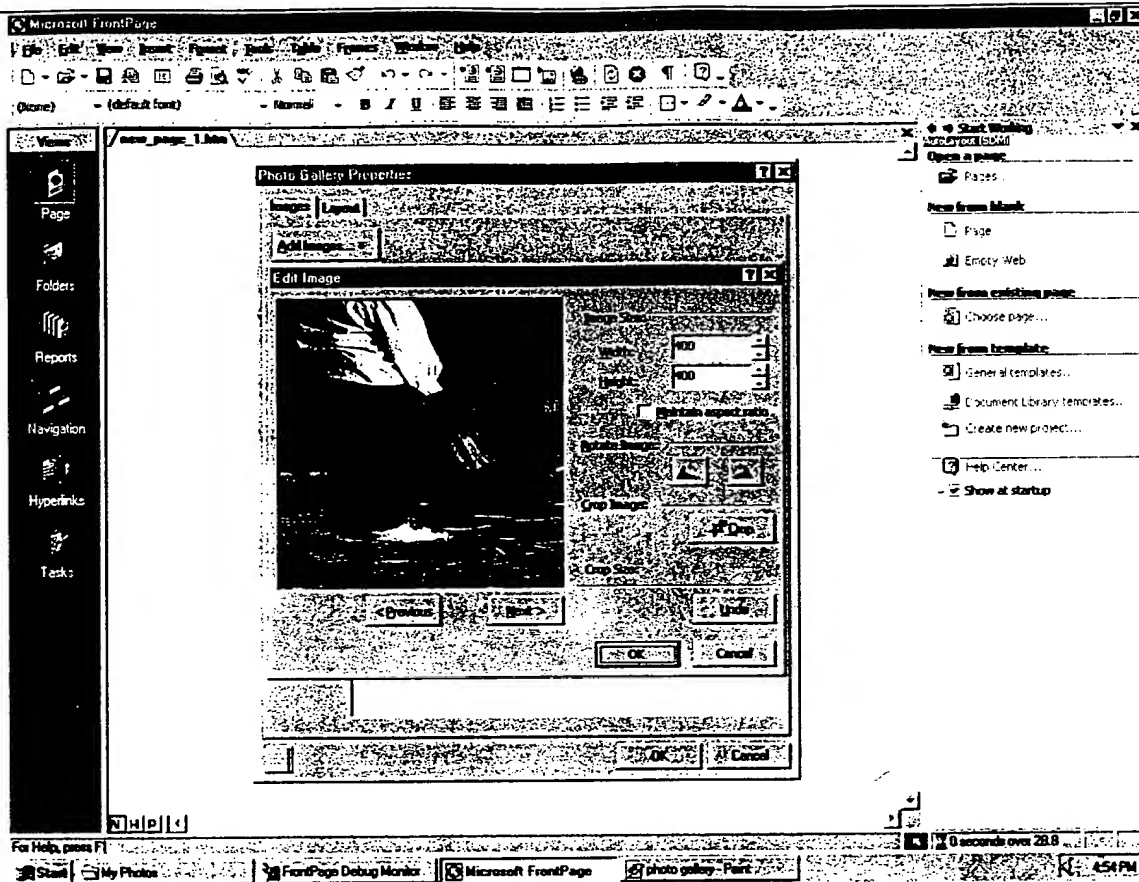
## APPENDIX 3: ENTRY POINT 3 – WEB SITE TEMPLATES
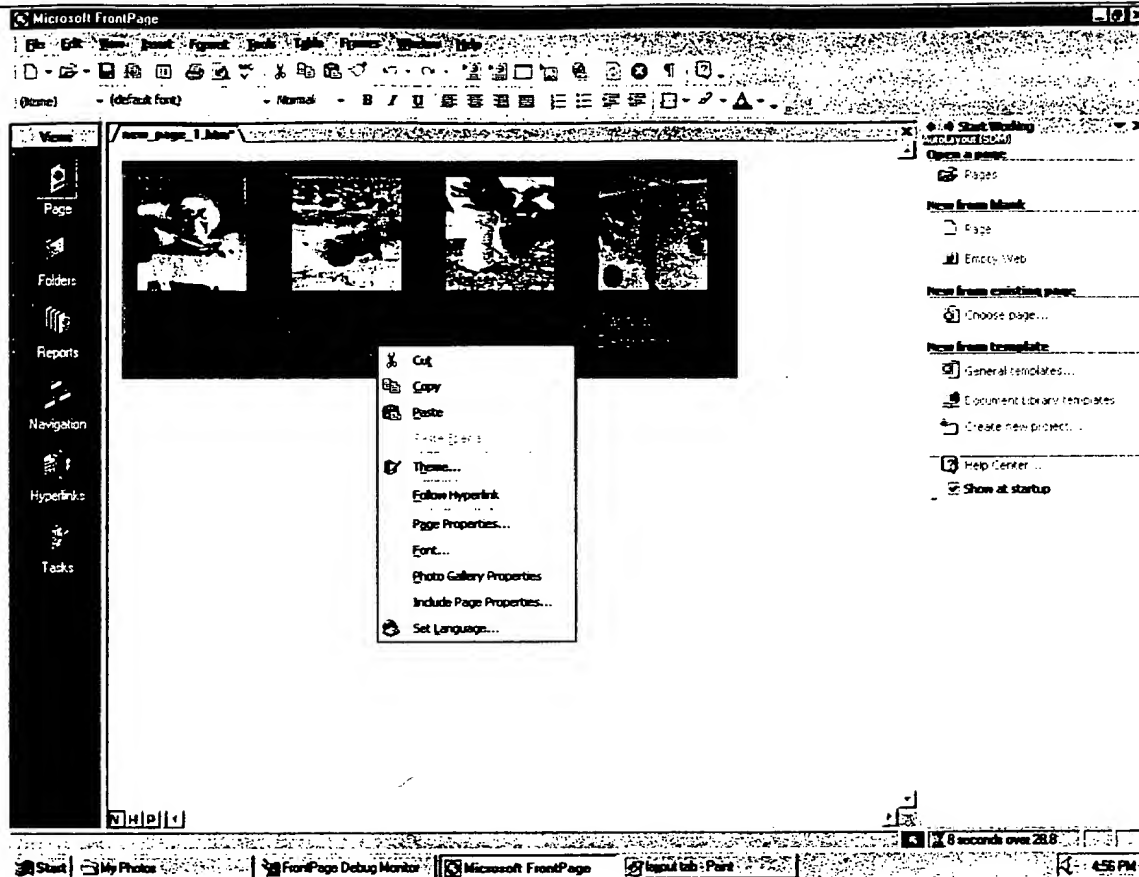
# APPENDIX 4: PHOTO GALLERY PROPERTIES

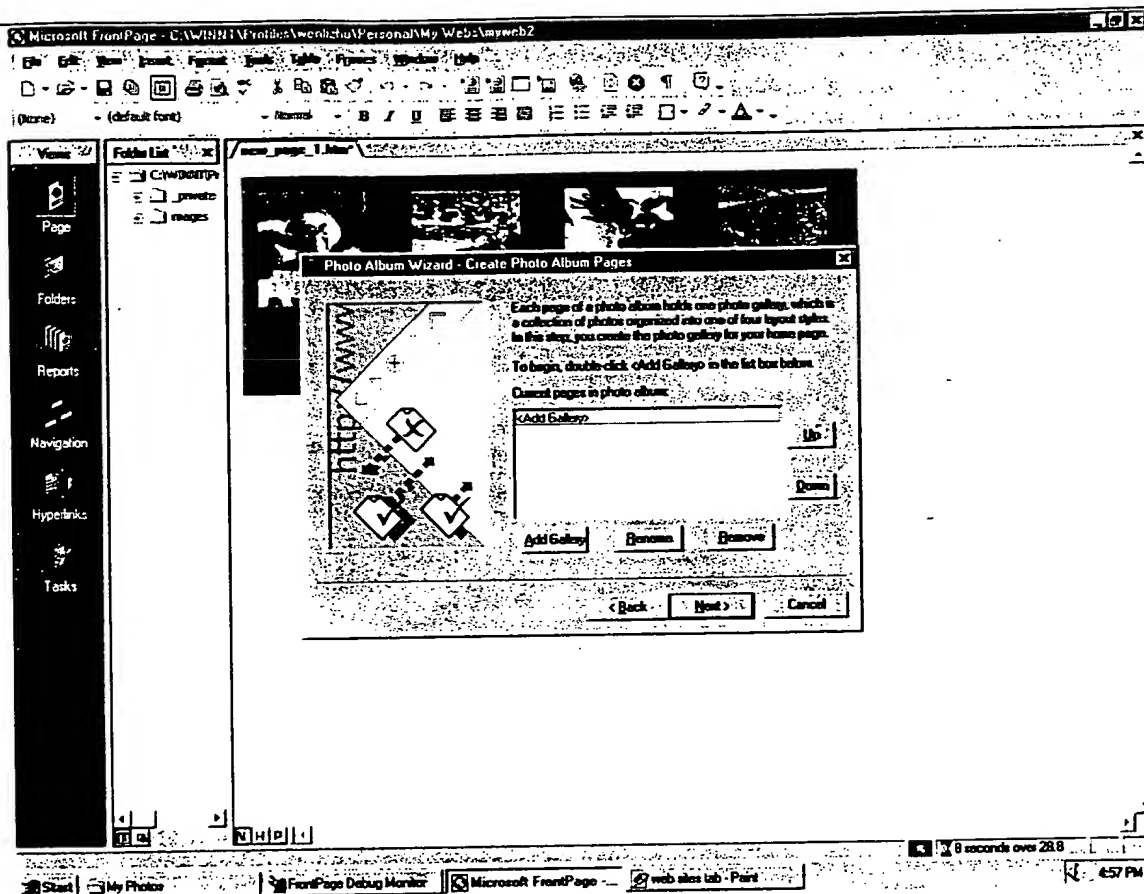## APPENDIX 5: PHOTO GALLERY PROPERTIES (LAYOUT TAB)

# APPENDIX 6: EDIT IMAGE

## APPENDIX 7: CONTEXT MENU

# APPENDIX 8: PHOTO ALBUM WIZARD



# APPENDIX 9: SUBJECTS



6248Data.xls

# APPENDIX 10: TASKS



Tasks.doc